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ABSTRACT

This study is an attempt to reconceptualize what variables are relevant from the perspective of a counselor in assessing person perception. Urban and rural high school students were used as judges. After watching a videotaped interview, they filled out questionnaires testing their accuracy of person perception, and memory of verbal and visual cues. They also summarized their impressions of the interviewee and his attributes. The 2 major aspects of person preception examined, i.e., differentiation, or the number of distinct concepts entertained by a person with respect to his world, and integration, the extent to which dimensional units of information can be interrelated in different ways to generate new and discrepant perspectives about stimuli, were found to be positively related to each other as well as to accuracy of perception, and memory of verbal and visual stimuli. An important implication stressed is that the aim of counseling be altered to the development of more abstract conceptual functioning rather than simple adjustment to societal norms, encouraging creative rather than accomodative characteristics. More open counseling relationships would be developed by counselors with effective person perception as defined in the study. (Author/KS)



Research in Person Perception and the Helping Relationship

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Some writers (notably Patterson, 1963; Rogers, 1961) have suggested that understanding another person and being able to communicate this desire to understand, may be at the heart of the counselling process. This concept has recently been reiterated and expanded upon by Carkhuff (1969), who emphasizes the basic importance in the helping process of communication which, in turn, is made possible only by sensitive and accurate discrimination. Whether termed perception, empathy, discrimination or sensitivity, the capability of the counsellor for observing client characteristics and understanding client communication is one of several relevant variables in the counselling process, and therefore offers promise in the selection and training of counsellors.

Research in the measurement of ability to understand others has taken several directions. One direction taken has consisted of attempts to obtain measures of what has been termed social perception. The general literature on perceiving other people has been reviewed as "the perception of persons" (Bruner and Tagiuri, 1954), as "the ability to judge people" (Taft, 1955), as "skill in social perception" (Bronfenbrenner, et al; 1958), and as "interpersonal perception" (Cline, 1964). The purpose of this paper will be to review some of this literature, and particularly those aspects of it which represent trends



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toward conceptualizing the process in tenns of differing levels of complexity in perceiving others. A major portion of the paper will be devoted to a description of a study by the present writer designed to reconceptualize the process of perceiving others and derive new measures for it.

In much of the early literature on the perception of others, the typical procedures used have been modeled after a study by Dymond (1948) and consisted of asking a judge to predict the response of another person on a questionnaire. The predicted and actual scores were then compared and the difference between them constituted an accuracy score. Although the measurement technique was basically the same in subsequent studies, various techniques were used for presenting the person to be judged. Bronferbrenner, Harding, and Gallwey (1958) used an interaction approach, which involved the subject in making predictions about people with whom he had interacted for a brief period of time. Chance and Meaders (1960) used a taped interview to present a subject to be judged. A third method used was the filmed interview. A set of testing instruments using this approach was developed by Cline (1955, 1964) and Cline and Richards (1960, 1961a, 1961b). Judges are shown filmed interview sessions in which interviewees are questioned about subjects such as, religious beliefs, political beliefs, strengths and weaknesses, and interests and hobbies. At the conclusion of each film, judges are required to fill out a questionnaire. The questionnaires



are designed to measure aspects of person perception such as ability to post dict behavior, ability to agree with individuals who know the interviewee well on descriptive adjectives, ability to accurately perceive and remember verbal cues, and ability to perceive accurately and remember visual cues. The "correct" answers are based on intensive studies of each of the interviewees. A composite Total Judging Score is computed from the results of the new subtests.

Filmed interviews have some obvious advantages over the other methods of presenting individuals to be judged. In addition to presenting the same individual in the same manner to different judges or the same judge at different times, individuals are presented in realistic fashion. On the other hand, the degree to which the questionnaires accompanying the Cline films measure those qualities deemed important in actually relating with others, migh be questioned.

The results of a recent study done at the University of Alberta (Sawatzky and Zingle, 1969), further emphasizes this question. The aforementioned film tests developed by Cline were administered to a sample of graduate and undergraduate university students. Also administered was the Dogmatism Scale (Rokeach, 1960) which purportedly measures a basic personality dimension, open-mindedness. Open-mindedness, by definition, involves an awareness of reality. An



open-minded person should be able to see each new person as he is rather than attempt to fit him into a stereotyped pattern. When the Dogmatism Scores were correlated with the Total Judging Scores, no relationship was found. When the scores on the Dogmatism Scale were correlated with the scores obtained by the subjects on the four person perception subtests, only one of these proved to be significant. This was the positive correlation between openmindedness and the subtest, "Perception and Memory of Verbal Stimuli". The hypothesized relationship between open-mindedness and accurate interpersonal perception was further pursued by dividing the total sample into five approximately equal groups on the basis of scores on the Dogmatism Scale. Contrary to expectations the group with the highest scores on the Dogmatism Scale also obtained the highest scores on three of the film subtests (Behavior Postdiction, Adjective Check List, and Perception and Memory of Visual Stimuli). This group in turn obtained the lowest scores on Perception and Memory of Verbal Stimuli. It was concluded by the authors, that several factors in the construction of the questionnaires accompanying the films tend to work against the open-minded person. First, in order to objectify the measurement of accurate interpersonal perception, the questions were designed in multiple choice form. The dogmatic individual, by definition, is more likely to come to firm decisions quickly on very limited evidence. Persons who are open-minded will tend to see more alternatives and will be less likely to designate answers as "correct descriptions". Thus it was decided that questionnaires utilizing free response questions would be more predictive of



personality qualities such as open-mindedness as well as of ability to understand and relate effectively with others.

These conclusions tend to be underscored by Cronbach (1955) in a paper in which he challenged much of the work in judging accuracy. Using logic, mathematics, and analyses of studies, he demonstrated that most judging experiments in the literature had flaws which rendered them largely uninterpretable. As a remedy he suggested the possibility of breaking down global judging scores into components. Two factors, he suggested, which accounted for much of what was general in this global measure were "Stereotype Accuracy" and "Differential Accuracy". "Stereotype Accuracy" involves an awareness of the social norm - the ability to identify characteristics which people have in common and not necessarily the ability to discriminate individual departures from the norm. "Differential Accuracy" refers to the tendency to make fine distinctions among people and thus to perceive them as different from one another. Thus Cronbach's findings suggested that it was possible for one to be an accurate judge because he had an accurate stereotype, or because he was able to predict specific differences among individuals, or both. Attempts by Cline and Richards (1960) to separate the two components are inconclusive. The emphasis placed by Cronbach and others, however,



on the importance of differentiation, has led to a recent theoretical and research emphasis on the extent to which one forms a differentiated conceptualization of persons in his environment (Bieri, 1955; and Harvey, Hunt and Schroder, 1961). The literature on this topic has generally been classified under the heading of cognitive or conceptual complexity.

The model of individual functioning based on cognitive complexity is based on the personality theory of Kelly (1955). Kelly believes that each individual develops personal constructs along which he construes his social environment. He views these constructs as being bipolar continuums with sematic antagonists at either pole; for example, good versus bad would be one construct. Cognitive complexity is a term introduced by Bieri (1955). In Bieri's view, a system may become complex because it reflects a number of dimensions or attributes, or because there is a great deal of differentiation along these dimensions. A samewhat different view of camplexity is advocated by Harvey, Hunt and Schroder (1961) and Schroder, Driver and Streufert (1967). Rather than conceptualizing complexity in terms of differentiation, these authors stress the importance of integration in conceptual activity. They view this as the relating or hooking of parts of a novel stimulus to each other and to previous conceptual standards. They emphasize that the number of dimensions is not necessarily related to the integrative complexity of the cognitive structure, but the greater the number of dimensions, the more likely the development of integratively complex connections or rules (Schroder, et al, 1967).



Although the theoretical basis of conceptual complexity has been well developed, attempts at measurement have met with somewhat less success. Factor analytic studies designed to identify a general complexity factor among commonly used complexity measures (Vannoy, 1965; Gardiner, 1968; Stewin, 1969) have yielded negative results. It was the view of the present writer that perhaps complexity might be conceived of as situation specific and that a measure of complexity of perceiving individual persons might be derived. It was decided to derive such a measure, utilizing the basic methodology of Cline (1964). Although in the questionnaires, measures of accuracy of perception of visual and verbal content would be retained, the Behavior Postdiction and Adjective Check List subtests would be replaced by free response questions yielding information which could be content analysed for scores on complexity. The first step in accomplishing this objective was to produce videotapes of interviews. Measures of accuracy of perception of visual and verbal content were then developed. The videotapes were then shown to the subjects of the study. On the basis of the responses of the subjects to the interviewees, scores of accuracy of perception of visual and verbal content were obtained. From a content analysis of the written responses, measures of complexity of person perception were derived. The following represents a more detailed explanation of these procedures.

Construction of the videotapes. The procedures used in presenting the persons to be judged were modeled after those developed and described



by Cline. The Cline films were not used since they are several years old, and the issues discussed did not appear to have general relevance; particularly for the adolescent population from which the sample of the study was derived.

It was decided for the purposes of the present study to videotape interviews with high school students. Five students were selected on the basis of their willingness and ability to express ideas in articulate fashion. Interviews were conducted by the present writer. In order to ensure equivalence over interviews all sessions followed a basic pattern, although some freedom was employed in varying the context or order of questions when the situation seemed to require it. The questions were on subjects of concern to high school students. The following areas were probed: (1) the purpose or aim of the school, (2) student involvement in establishing school rules, (3) characteristics of a good teacher, (4) extracurricular activities engaged in, (5) the role of parents in relation to adolescents, (6) characteristics which seem to be associated with popularity in school, (7) attitude towards drugs, (8) religious and personal values, (9) reaction to criticism, (10) aspirations for the future, (11) reaction to the interview.

Subjects In order to increase the reliability of the study as well as the generalizability of the results (Sidman, 1960), an intergroup replicative design was employed. In essence, two studies were conducted



and were, as closely as possible, organized in parallel fashion. The two samples were each made up of both urban and rural high school students. Information related to the numbers in the samples and distributions according to sex and urban/rural residence is summarized in Table 1.

TABLE 1
DESCRIPTION OF THE SAMPLES

Primary Sample		Replicative Sample				
<u>Urban</u> Rural		<u>Urban</u> Rural				
Male Female	39 38	33 52	Male Female	33 25	31 52	

All testing was done in group sessions. Two different pairs of interviewees were used with the primary and replicative samples.

The procedure used was that the questionnaire pertaining to an interview was filled out immediately after the videotape of that interview was shown.

Measures of Accuracy of Cues Attended to

Accuracy of Perception and Memory of Verbal Content. This is a 'true' or 'false' type of test developed for the purposes of the present



study and modeled after a test devised by Cline and Richards. The test for each videotape interview consists of twenty statements, ten of which were made by the interviewee and ten which were not made. Both the true and false statements were selected so that the subject areas discussed were equitably sampled. Several additional procedures were employed in constructing the 'false' statements. One approach was to construct statements which, considering the character, general viewpoints, and appearance of the interviewee, could have been made by him. Another approach was to simply negate a positive statement or make positive a negative statement made by the interviewee. The true and false items were randomly distributed. The accuracy of all statements was confirmed by having an independent rater score the items as true or false while viewing the videotape. I

The test is administered by requiring subjects, after viewing each videotape, to fill in the circles beside those statements which were made during the interview. A score is arrived at by adding the correct responses.

Accuracy of Perception and Memory of Visual Content. This test has a format which is identical to that of Accuracy of Perception and Memory of Verbal Content. Subjects are required to fill in the circles beside



¹Since the inter rater reliability was high on this measure as well as those which follow, only two raters were used.

those statements which are descriptive of some aspect of the interviewee's general appearance, wearing apparel, or mannerisms during the interview. A basic consideration in the construction of the test was to equitably distribute the items reflecting these three areas. Since the interpretation of some of the items as true or false could be construed as being subject to individual interpretation, a second rater independently scored and confirmed the correct responses by marking the protocols while actually viewing the videotape. The true and false items were randomly distributed. A score is arrived at by adding the correct responses.

Measures of Complexity of Person Perception

Differentiation. This term was defined as the number of distinct concepts entertained by a person with respect to a particular part of his world. Thus, for a given domain of cognition, one might assess its level of differentiation simply by asking the subject, in effect, to list its elements. Subjects in the present study were asked to list the attributes which they felt would adequately describe each stimulus person. In addition they were required to give reasons why each word selected was appropriate. The latter procedure made it possible when scoring the responses to determine whether two descriptive words were functionally equivalent in the subject's conceptual space.

On the assumption that the complex functioning involved in differentiation is increased when the attributes represent many categories, rather



than merely a number of dimensions within one category, each of the attributes assigned by a subject was classified as representing one of the factorial dimensions isolated by Osgood, Suci and Tannenbaum (1957). The following outline was used as a guide for scoring the responses.

- (1) Morally evaluative dimension refers to a judgment based on the good-bad pivot and applies to the moral sphere. Words such as honest, fair, clean, strong willed, right, might apply to this dimension.
- (2) Aesthetically evaluative dimension refers to a judgment based on the good-bad pivot and applies to dress and general appearance. Words such as attractive, handsome, well-dressed and sloppy might apply to this dimension.
- (3) Socially evaluative dimension refers to a judgment based on the good-bad pivot which is applied to relations with others.

 Words such as friendly, popular, sociable, conceited, prejudiced, envious, and resentful might apply to this dimension.
- (4) Emotionally evaluative dimension refers to a judgment based on the good-bad pivot and applies to the emotional sphere. Words such as nervous, unhappy, excitable, calm, easily aroused, and bad tempered might apply to this dimension.
- (5) Activity refers to a judgment in which the words activepassive are used as the pivot. Words such as progressive, involved, flexible, conservative, participating and independent might be applied to this dimension.
- (6) Potency refers to a judgment made using the strong-weak pivot. Thus the common character of potency or toughness is apparent here. Words such as tenacious, spineless, shallow, or confident might apply to this dimension.



An assessment of the reliability of rating responses in this manner was computed after two independent raters scored the responses made by 91 of the subjects. The two ratings showed 85 percent agreement.

A differentiation score was arrived at by adding the number of attributes assigned by a subject to the number of different categories or kinds of dimensions used. For example, a hypothetical individual might have used five different words to describe one of the interviewees. One of these might have been rated as morally evaluative, two as socially evaluative and one as an activity dimension. This individual would then receive a score of eight, (the number of assigned attributes plus the number of separate categories).

Integration. This was defined as the extent to which dimensional units of information can be interrelated in different ways in order to generate new and discrepant perspectives about stimuli (Schroder et al, 1967). In the present study the ability to integrate in this manner was measured by having subjects summarize their impressions of the interviewee. The following instructions were given to students after they had performed the other tasks with respect to perception of the interviewee:

On the basis of the attributes you have assigned to the interviewee, briefly summarize your impressions of him.



The aforementioned authors (Schroder et al, 1967) have proposed a scoring manual which was designed for inferring a level of conceptual structure from a verbal response. Verbal responses are scored on a seven-point scale which represents a continuum from low to high levels of integrative complexity. In scoring impression formation responses, however, they report experiencing same difficulty in distinguishing fine points along the integration index scale. Consequently, they use the manual in a more generalized way when dealing with this domain. The latter procedure was followed in the present study. Responses were scored in dichotomous fashion -- as exemplifying either low or high integration index. In assigning a rating, the primary considerations were: abstract structures should exemplify less compartmentalization and over-generalization, as well as greater awareness of the internal cognitive processes in the target person. Also, abstract persons should be more inclined to generate perceptions which indicate some conflict, that is, they will not likely be totally positive or negative -- and be able simultaneously to hold these in focus.

All responses were scored by the present author. However, an inter rater reliability check was carried out. Twenty responses were independently scored by a Ph.D. psychologist who has done extensive work in the measurement of conceptual structure. The percentage of agreement was 90 percent, indicating a satisfactory inter rater reliability.



In the analysis of the data, correlations were computed to determine the degree of interrelationship among the variables which were measured. The results for the two samples are outlined in Table 2 and 3. As shown, both accuracy of perception and memory of verbal stimuli and accuracy of perception and memory of visual content were shown to be positively related to differentiation. Differentiation, in turn, was shown to be positively related to integration.

Discussion. The main perspective from which the results of this study can be viewed is from the standpoint of the measurement techniques involved. The videotaped interview proved to be an effective method of presenting "real" persons in standardized fashion to groups of subjects. The measures of integration and differentiation, based on free verbal responses, would appear to have greater validity than similar measures in other studies based on supplied dimensions which might have little or no relevance to the subject. Finally, the free verbal descriptions were shown to be amenable to reliable content onalysis.



TABLE 2 INTERCORRELATIONS AMONG VARIABLES FOR THE PRIMARY SAMPLE:

Variables	1	2	3	4
1. Accuracy in Verbal Content	1.000			
2. Accuracy in Visual Content	.089	1.000		
3. Differentiation	.174*	.294***	1.000	
4. Integration	.170	.036	.227***	1.000

TABLE 3 INTERCORRELATIONS AMONG VARIABLES FOR THE REPLICATIVE SAMPLE

Variables	1	2	3	4
1. Accuracy in verbal Content	1.000			
2. Accuracy in Visual Content	.710***	1.000		
3. Differentiation	.421***	.434***	1.000	
4. Integration	.362***	.285***	.400***	1.000

^{* -} significant at .05 level
** - significant at .01 level
*** - significant at .001 level



It would appear that the basic procedures of the present study, particularly with respect to obtaining a measure of complexity of person perception, might be usefully applied in a variety of situations. The societal implications for viewing others in complex rather than dogmatic and rigid fashion need no reiteration. Thus, meaningful work could be done in the area of prejudice, for example, by having subjects make judgments about an interviewee from one of the racial groups which has been the target of discrimination. The number and kind of differentiations and the level of integration could be compared with data obtained with respect to judgments about a person of the same race as the subject. On the basis of several theore ical models it could be argued that the judgments of persons who are the object of prejudice would be less complex than would those on persons in the 'in group'.

Another direction which the use of the techniques of this study might take is in evaluating the outcome of counseling or therapy.

Progress in therapy is difficult to assess because of an inadequate qualitative conception of "normality". Too frequently, normality is viewed in terms of its statistical connotations; thus progress becomes a matter of simple adjustment to societal norms. It is the view of the present writer that the concept of more abstract conceptual functioning might be conceived of as a possible objective to be attained in behavior modification. Striking similarities are evident



between abstract conceptual functioning and the characteristics which Maslow (1962) associates with self actualization or Combs and Snygg (1959) associate with the fully functioning personality. At the opposite extreme, as Harvey, Hunt and Schroder (1961) point out, pathological reactions such as schizophrenia or states of depression, are similar in that they show inflexible, overgeneralized interpretation or use of a single interpretative dimension. Thes the characteristics are also central in concrete conceptual functioning. Since the majority of cases in therapy or counseling are rooted in problems of social interaction, and since progression to a more abstract conceptual structure occurs through the process of differentiation and integration, it would appear justifiable to advocate the measurement technique used in the present study as one possible indicator of progress. Thus, for example, in dealing with problems essentially social in nature, one possible index of progress might be an increase in measures of complexity with respect to other persons.

Viewed in the aforementioned sense, "normality" characterizes what we should strive to produce in education and development (Hunt, 1966), although it is by no means the goal of many training practices in current institutions (Harvey, Hunt and Schroder, 1961). For example, it has been shown (Harvey, Prather, White and Hoffmeister, 1968) that a disproportionately large number of teachers are classifiable at the concrete level of conceptual functioning and exhibit



the modes of behavior characteristic of this level of functioning; dictatorialness and punitiveness. School personnel have been repeatedly accused (Anderson, 1968; Friedenberg, 1967; Kozol, 1967) of encouraging accommodative rather than creative behavior in our schools. Of the various school personnel, counselors possibly deal most directly with aspects of human behavior. Consequently, an increasing number of researchers (Allan, 1967; Fox, 1969; Kemp, 1962, 1966; Whitely, Sprinthall, Mosher and Donaghy, 1967) have focused their attention on the identification of basic personality characteristics which might facilitate flexible and open counseling relationships. It would seem reasonable to suggest that the techniques of the present study might usefully contribute to this research. It might be predicted, for example, that ability to view adolescents in complex fashion, as this concept was defined in the study, would be one possible predictor of meaningful relationships with individuals of this age group. It is the intention of the present investigator to examine this notion in future research.



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